RECLAMATION
Managing Water in the West

WaterSMART Program

Dean Marrone, Avra Morgan, Collins Balcombe, and Irene Hoiby

April 16 & 17, 2019

Overview of this Breakout Session

- **Update on WaterSMART funding and this year's schedule**
- **Focus on newer WaterSMART opportunities and program developments**
- **Discussion: The application and award process, timing, and planned improvements**

WaterSMART Program

WaterSMART Funding

Program	FY 2019 President's Budget	FY 2019 Enacted	FY 2020 President's Budget
WaterSMART Grants	$10 million	$34 million	$10 million
Cooperative Watershed Management Program	$250,000	$2.25 million	$250,000
Basin Study Program	$2 million	$5.2 million	$2 million
Title XVI Program	$3 million	$58.6 million	$3 million
Drought Response Program	$2.9 million	$9 million*	$2.9 million
Water Conservation Field Services	$1.75 million	$4.2 million	$1.75 million
Total	$19.9 million	$113.2 million*	$19.9 million

*Includes additional funding added after appropriations: $5 million for the Drought Response Program

2019 WaterSMART Schedule

Program	Opportunity	FOA Post Date	FOA Close Date
Drought Response Program	Drought Contingency Planning	FY 2020 FOA expected Summer 2019	TBD
	Drought Resiliency Projects	January 24, 2019	March 27, 2019
	Emergency Response Actions	Applications for emergency drought assistance are accepted on an ongoing basis	
WaterSMART Grants	Water and Energy Efficiency Grants	January 31, 2019	March 19, 2019
	Small-Scale Water Efficiency Projects	January 24, 2019	April 24, 2019
	Water Marketing	Expected April 2019	TBD
Cooperative Watershed Management Program (CWMP)	Phase I (Watershed Groups)	Expected May 2019	Expected to close July 2019
	Phase II (Watershed Management Projects)	October 10, 2018	February 20, 2019

2019 WaterSMART Schedule

Program	Opportunity	FOA Post Date	FOA Close Date
WIIN Desalination	WIIN Act Desalination Construction Projects	Expected late April or early May 2019	TBD
Title XVI	Congressionally Authorized Projects	March 4, 2019	April 22, 2019
	WIIN Act Title XVI Projects	Expected late April or early May 2019	TBD
	Water Reuse Research	Expected May 2019	TBD
Basin Study Program	Applied Science Tools	May of 2019	TBD

Program Developments

- March 2019 Amendments to SECURE Water Act
- WaterSMART Water and Energy Efficiency Grants criteria
- Timing of funding opportunities, schedule for awards, and planned improvements

New WaterSMART Funding Opportunities

- **WIIN Act Title XVI (Water Reuse) and Desalination Projects**
- **Small Scale Water Efficiency Projects (SWEP)**
- **Cooperative Watershed Management Program (CWMP)**
- **Water Marketing Strategy Grants**
- **Applied Science Tools Grants**

New WaterSMART Funding Opportunities

- **Questions for stakeholder participants: How many of you are interested in funding for . . .**
  - **On-the-ground construction projects (raise your hand)?**
  - **Water resources planning projects?**
  - **Development of models, data, and data platforms?**
  - **Other types of projects?**

WIIN Act Projects
New in FY 2017

Water Infrastructure Improvements for the Nation (WIIN) Act

- **Water Recycling Projects –** WIIN amendments allow new reclamation and reuse projects to compete for funding under the Title XVI Program

- **Desalination Projects –** Under the WIIN amendments to the Desalination Act, Reclamation is providing funding for construction of ocean and brackish water desalination projects

Small-Scale Water Efficiency Projects
New in 2017

- **Small-scale on-the-ground water conservation and efficiency projects**
- **Up to $75K in Federal funds, maximum total construction costs of $200K per project**
- **What's new:**
  - **Opportunity for small projects to be competitive**
  - **Streamlined application process**
  - **Simplified evaluation criteria**

Small-Scale Water Efficiency Projects

FY 2019 Appropriations $3 million

- **Eligible projects include but are not limited to:**
  - **Irrigation flow measurement**
  - **SCADA and Automation**
  - **Municipal metering**
  - **Irrigation measures**
  - **Other similar projects**

Cooperative Watershed Management Program
Phase II New in 2017

Phase I	**Watershed group development, restoration and project design**
Phase II	**Implementation of watershed management projects**

- **What's new:**
  - **Opportunity for on-the-ground projects**
  - **Watershed management projects eligible**
  - **Open to watershed groups**

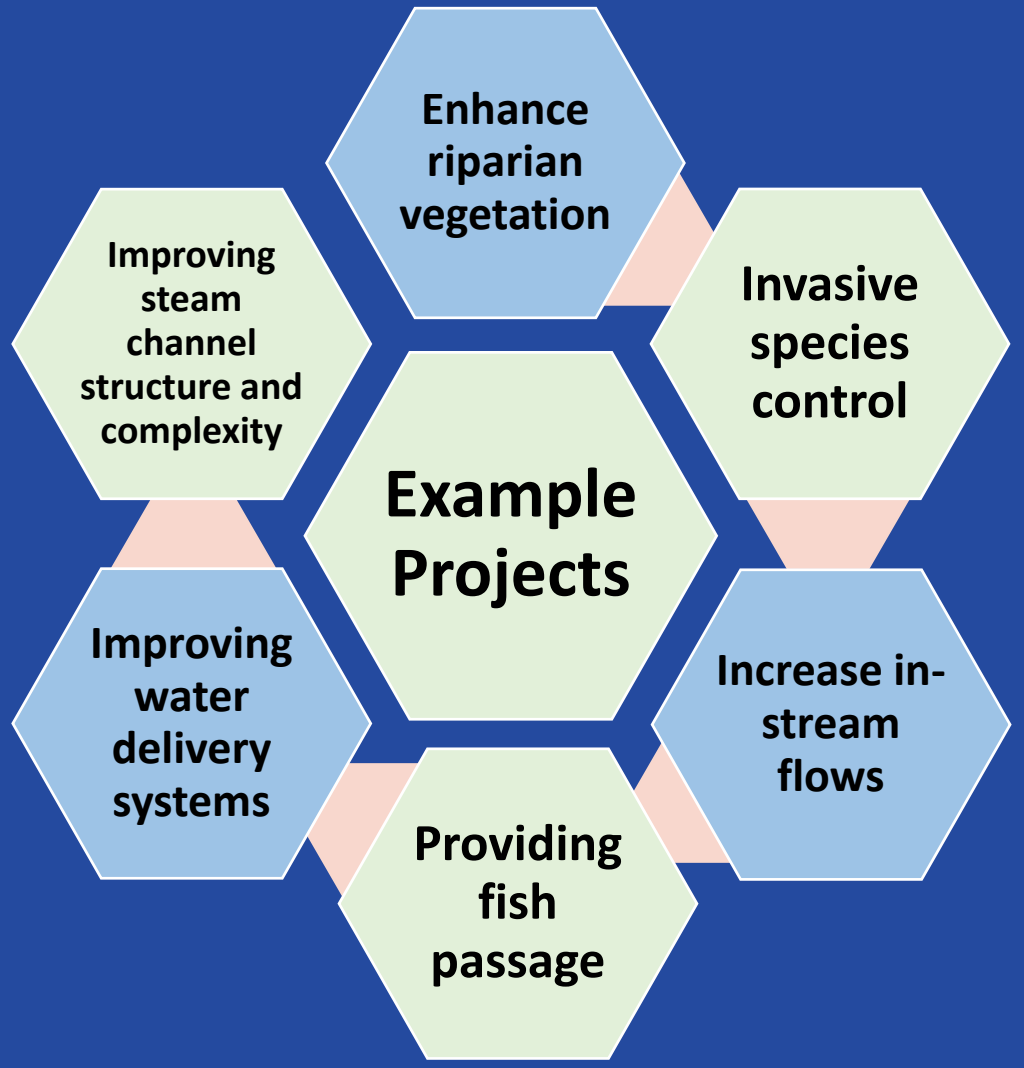
Cooperative Watershed Management Program

FY 2019 Appropriations $2.25 million

Phase II

- Implement watershed management projects

- Up to $300,000 per project
- Projects completed within 2 years
- 50% non-Federal cost share required



Water Marketing Strategy Grants
New in 2017

- **Program Objective:** Water markets between willing buyers and sellers can be used to help water users meet demands efficiently in times of shortages, preventing conflicts
- **What's new:**
  - Stand-alone opportunity for planning activities to develop a water marketing strategy
  - Up to $200k for a 2-year project
  - Up to $400k for a 3-year project

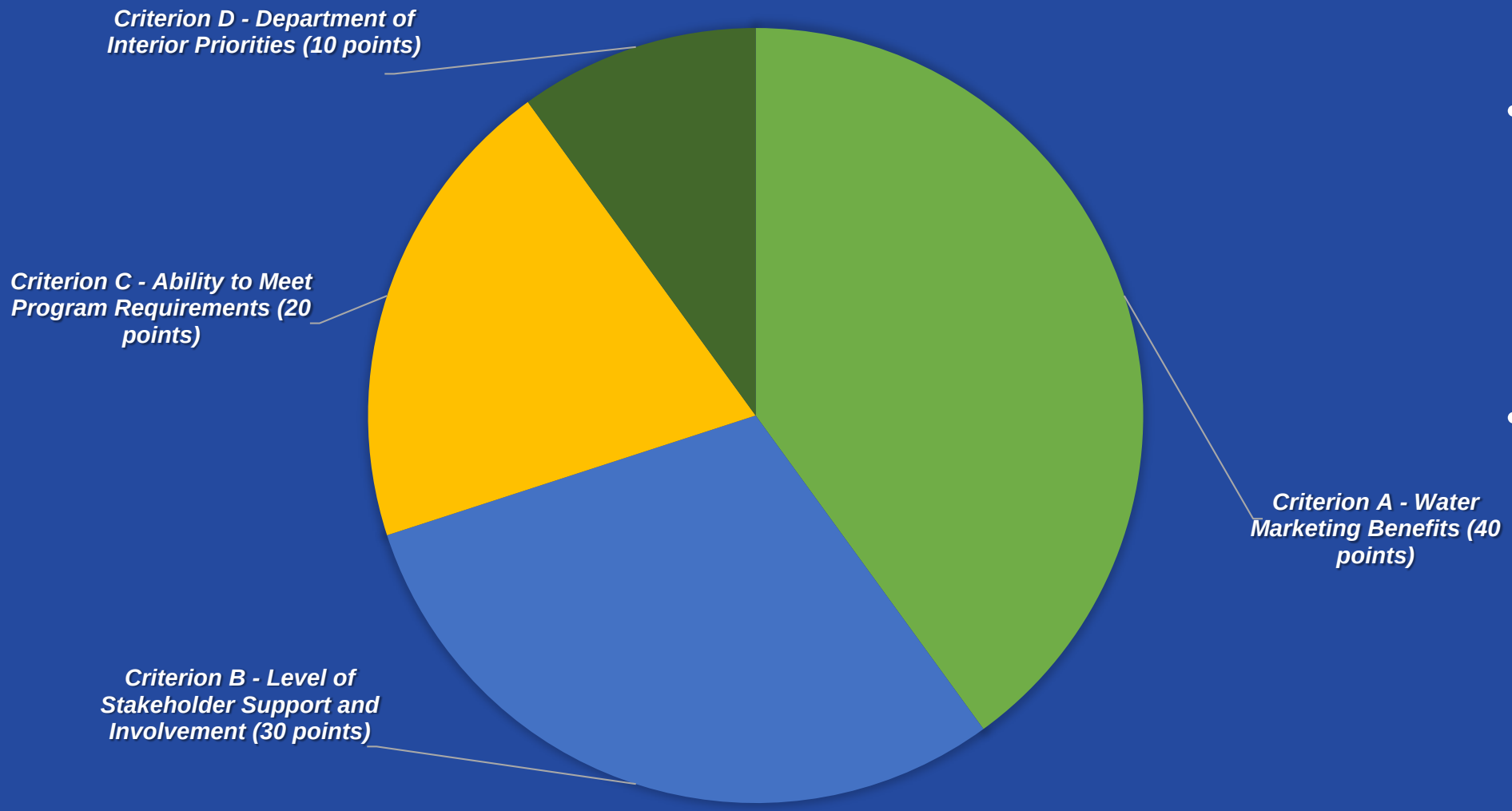
Water Marketing Strategy Grants

FY19 Appropriations $3 million

- **Eligible applicants: States, tribes, irrigation and water districts and other entities with water delivery authority**
- **Eligible activities:**
  - **Outreach and partnership building**
  - **Scoping and planning**
  - **Development of a water marketing strategy document**
  - **Pilot activities to further the development of a water marketing strategy**

Water Marketing Strategy Grants

Evaluation Criteria



- **Applications will be evaluated against the evaluation criteria which comprise a total of 100 points**
- **Evaluation criteria can change year to year, be sure to read the funding opportunity announcement**

Drought Response Program

FY 2019 Appropriations $9 million

Drought Contingency Planning

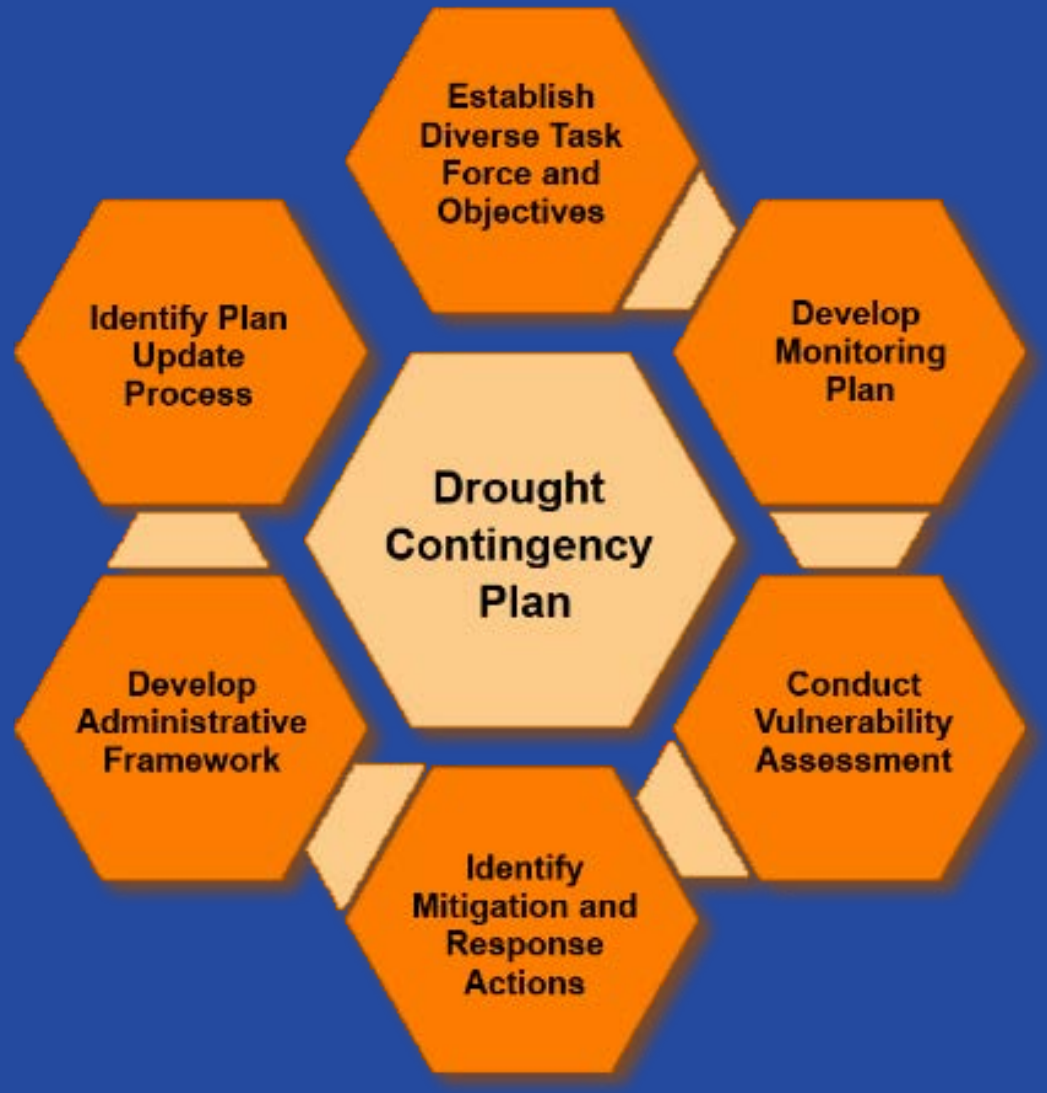
Drought Resiliency Projects

Emergency Response Actions

Drought Response Program

Drought Contingency Plans

- Drought plans come in different shapes and sizes
- Reclamation provides a flexible framework for non-Federal entities to use
- Recipients can use funding to develop or update a drought contingency plan



Drought Response Program

Drought Resiliency Projects

Eligible Projects Include:

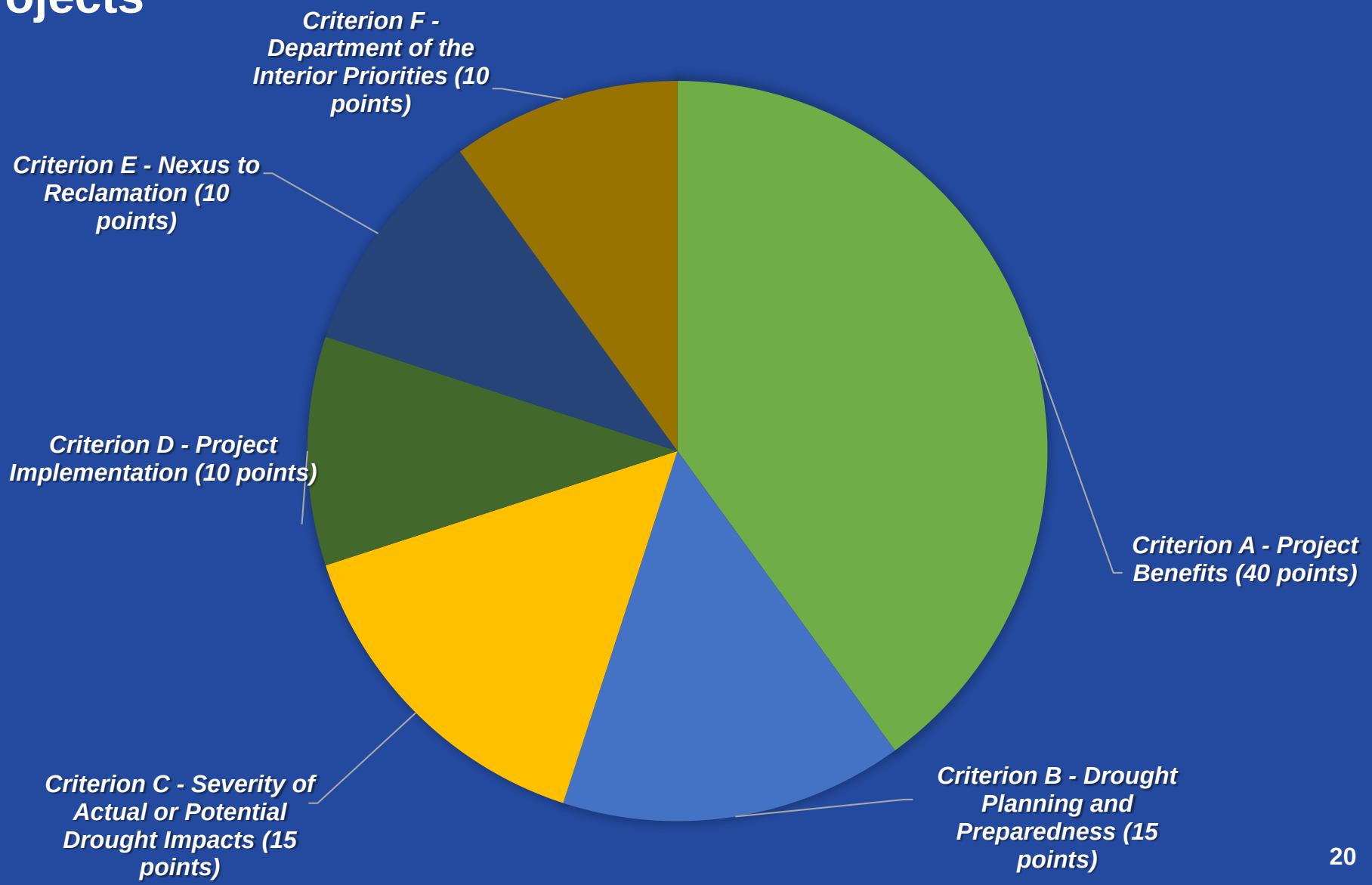
- Infrastructure Improvements
  - New or modified conveyance system components
  - Additional water storage or recharge facilities
  - Capture and treat alternative supplies
- Decision Support Tools & Modeling
  - Tools to support water marketing
  - Tools to convey water supply information
  - Measurement
- Environmental Protection
  - Improve habitat
  - Install fish screens and ladders

Drought Resiliency Projects

Drought Response Program

Drought Resiliency Projects

Evaluation Criteria



Applied Science Grants–
New in 2019

- **Develop tools, information and modeling capabilities to support improved water management**
  - **Up to $150k for a 2-year project**
  - **Up to $300k for a 3-year project**
- **What's new:**
  - **West-wide opportunity to develop applied science tools**
  - **Open to water managers or others who partner with water managers, including universities, non-profits or research institutes**

Applied Science Grants

FY19 Appropriations $2 million

- **Eligible applicants: states, tribes, irrigation districts, water districts, universities, nonprofit research institutions, organizations with water or power delivery authority, or nonprofit organizations**
- **Eligible activities:**
  - **Improve or enhance modeling capabilities**
  - **Develop reservoir operations alternatives or compare alternatives**
  - **Improve or adapt forecasting tools and technologies**
  - **Improve access to and use of water resources data**

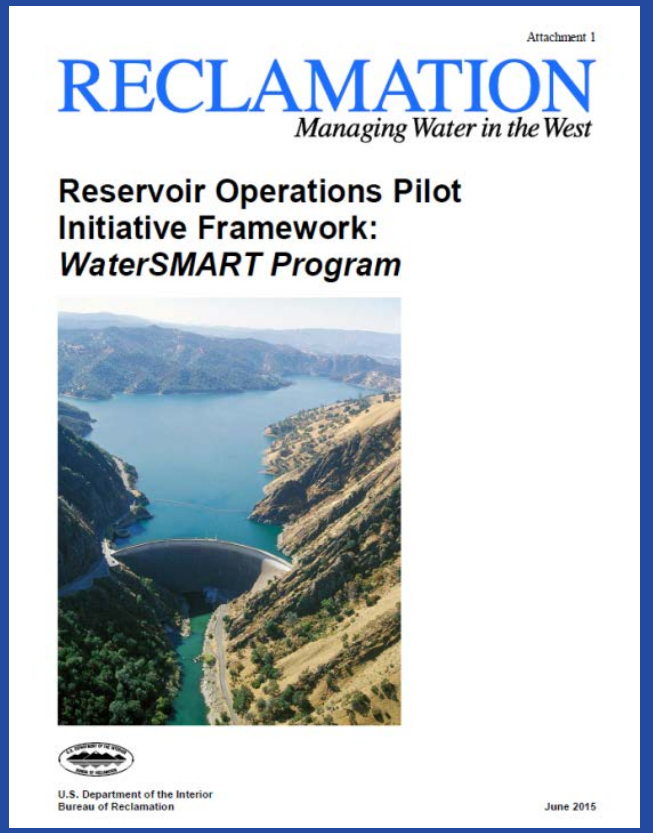
Highlights from the Great Plains Region

- **Questions for stakeholder participants:**
  - **Did you know that WaterSMART can be used to support different phases of a project, from planning and tool development to implementation?**
  - **What types of risks and vulnerabilities are you facing? This will help you identify which WaterSMART activity to apply for.**

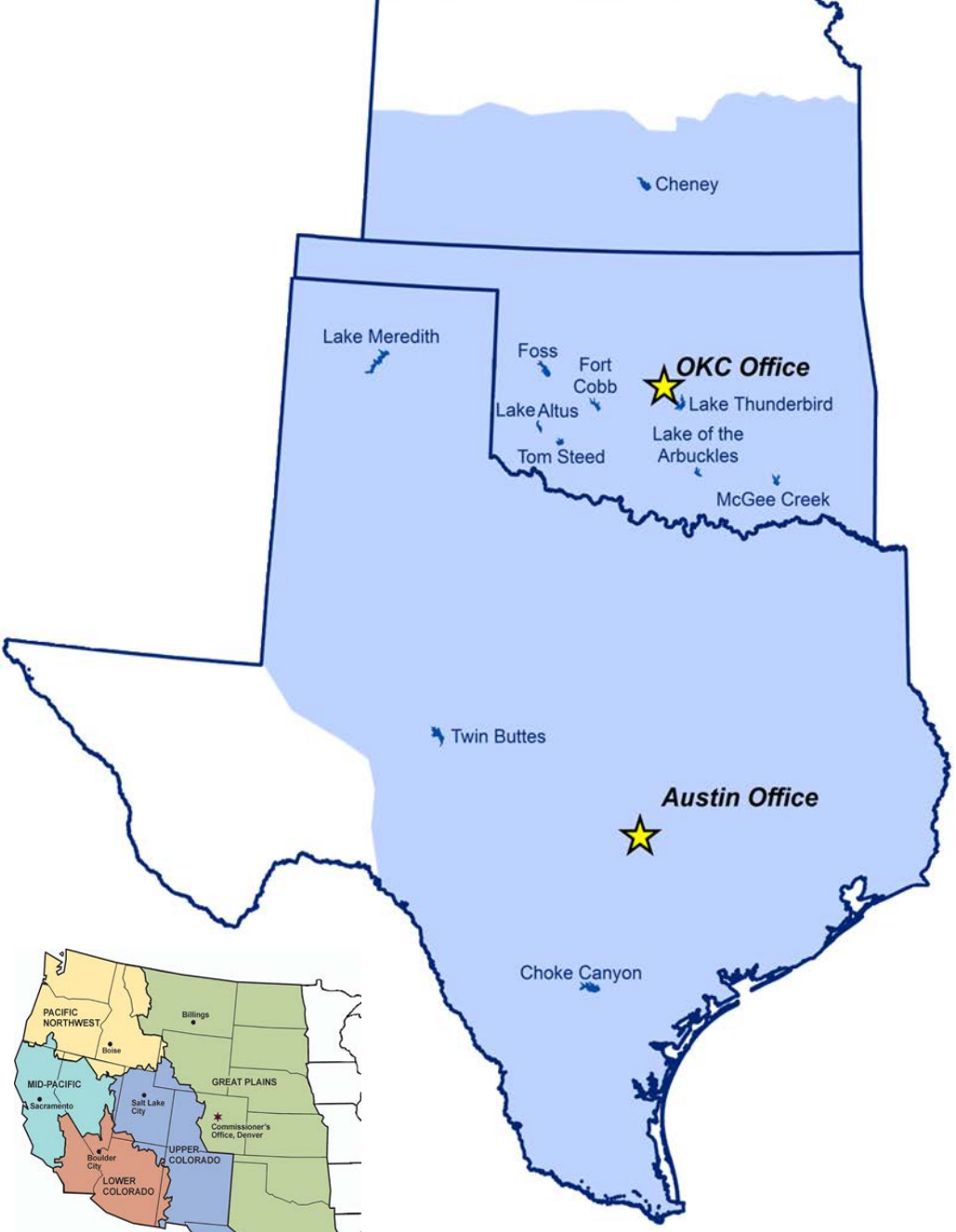
Reservoir Operations Pilot Initiative

Pilot studies to identify possible improvements to western reservoir operations by:

- incorporating improved scientific information,
- enhancing operational flexibility, and
- assessing changes to reservoir operations to address water management challenges, such as drought, system restrictions (e.g., lack of carryover storage) and competing demands for water



Reservoir Operations Pilot Initiative Framework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Lake Thunderbird
Lake Altus
Lake of the Arbuckles
Tom Steed
McGee Creek
Twin Buttes
Austin Office
Choke Canyon
PACIFIC NORTHWEST
Billings
Boise
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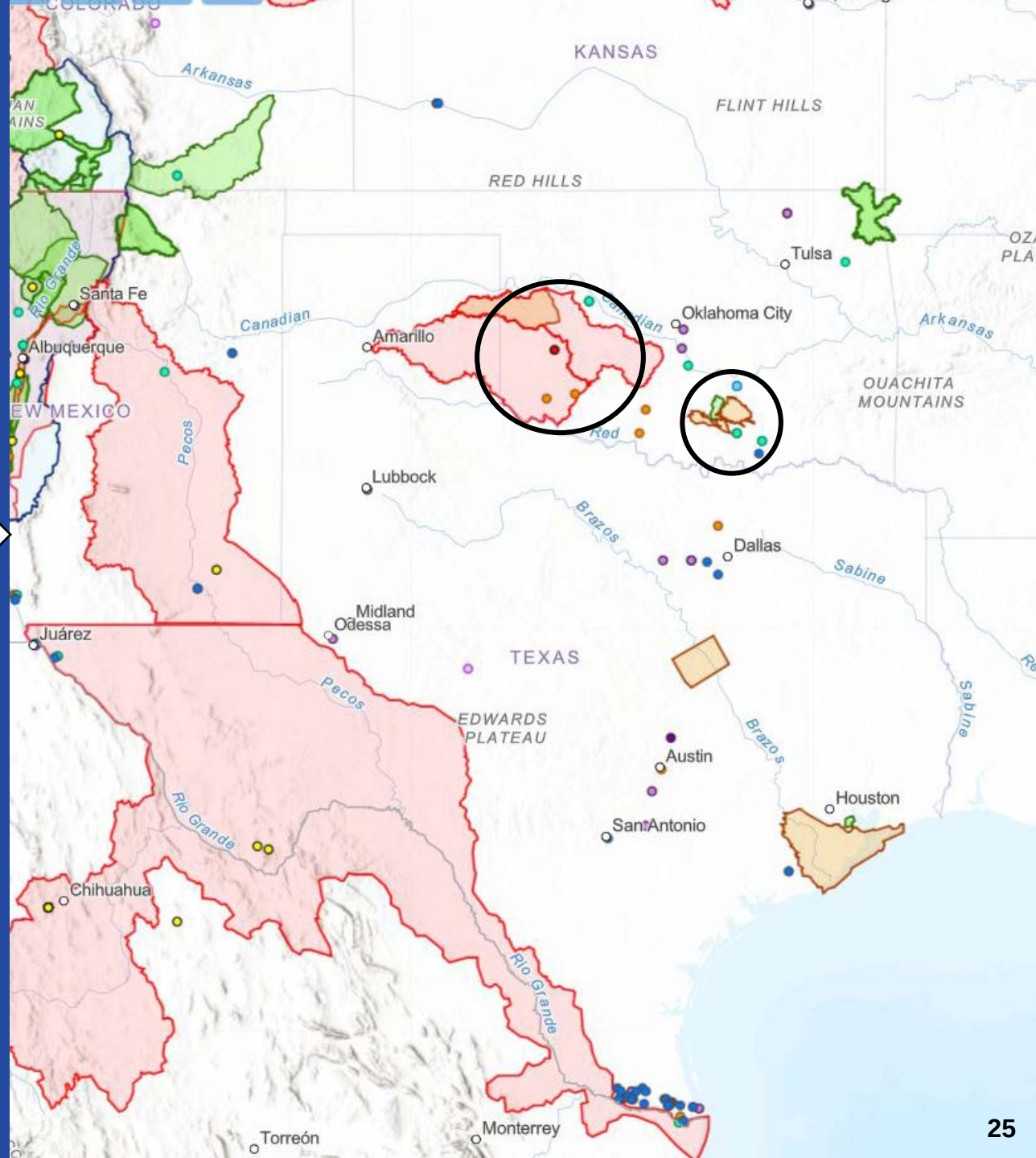
Sacramento
Salt Lake City
GREAT PLAINS
Commissioner's Office, Denver
Boulder City
UPPER COLORADO
LOWER COLORADO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NEW MEXICO
Pecos
Red
Lubbock
Brazos
Dallas
Sabine
Midland
Odessa
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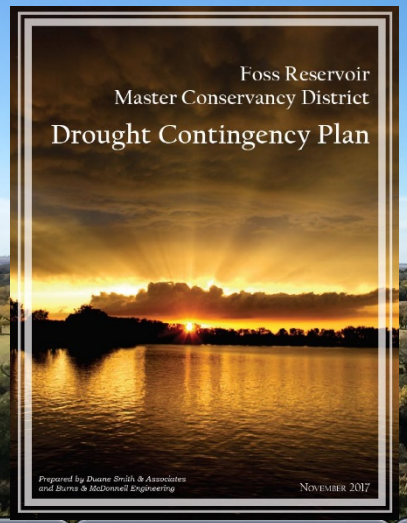
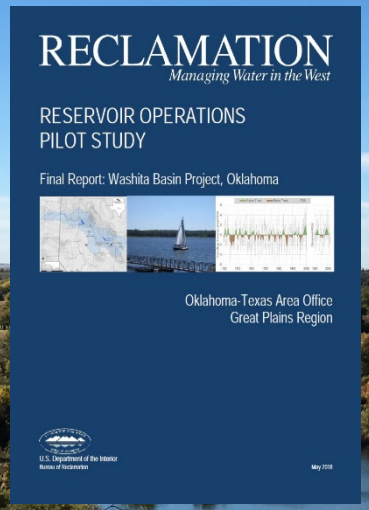
TEXAS
Pecos
EDWARDS PLATEAU
Austin
Brazos
Sabine
Houston
San Antonio
Rio Grande
Chihuahua
Rio Grande
Torreón
Monterrey

Issue - Catastrophic drought in Western Oklahoma (2011-2015)

Leveraging WaterSMART programs to meet local needs

Case Study – Southwest Oklahoma



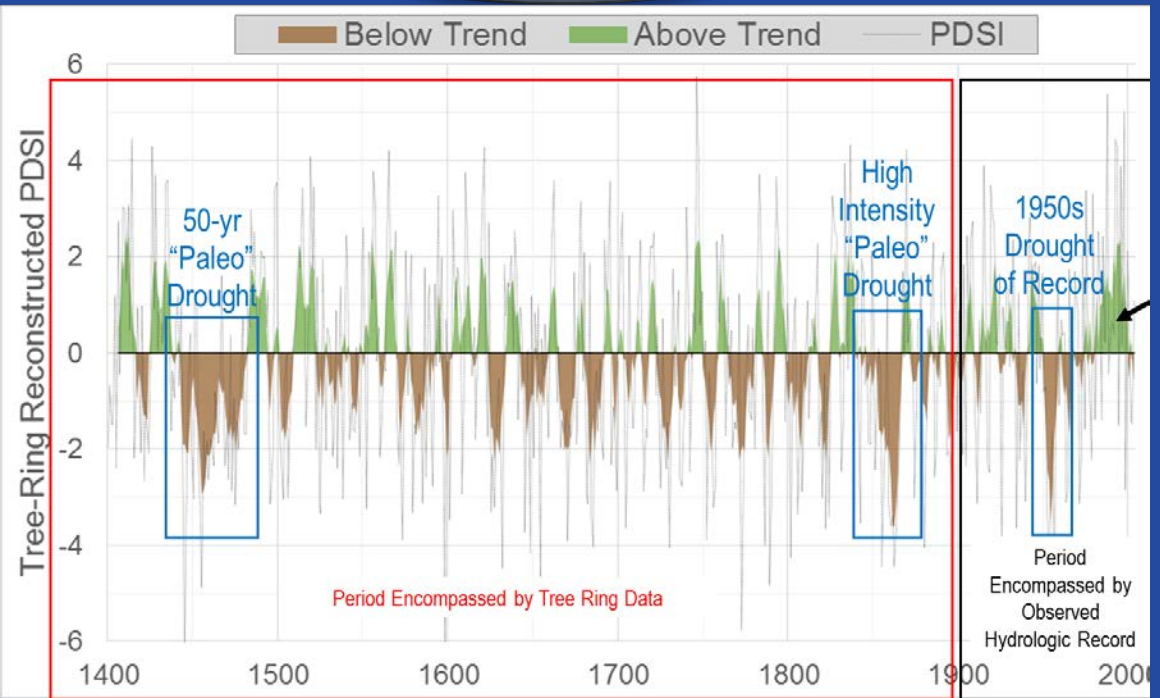


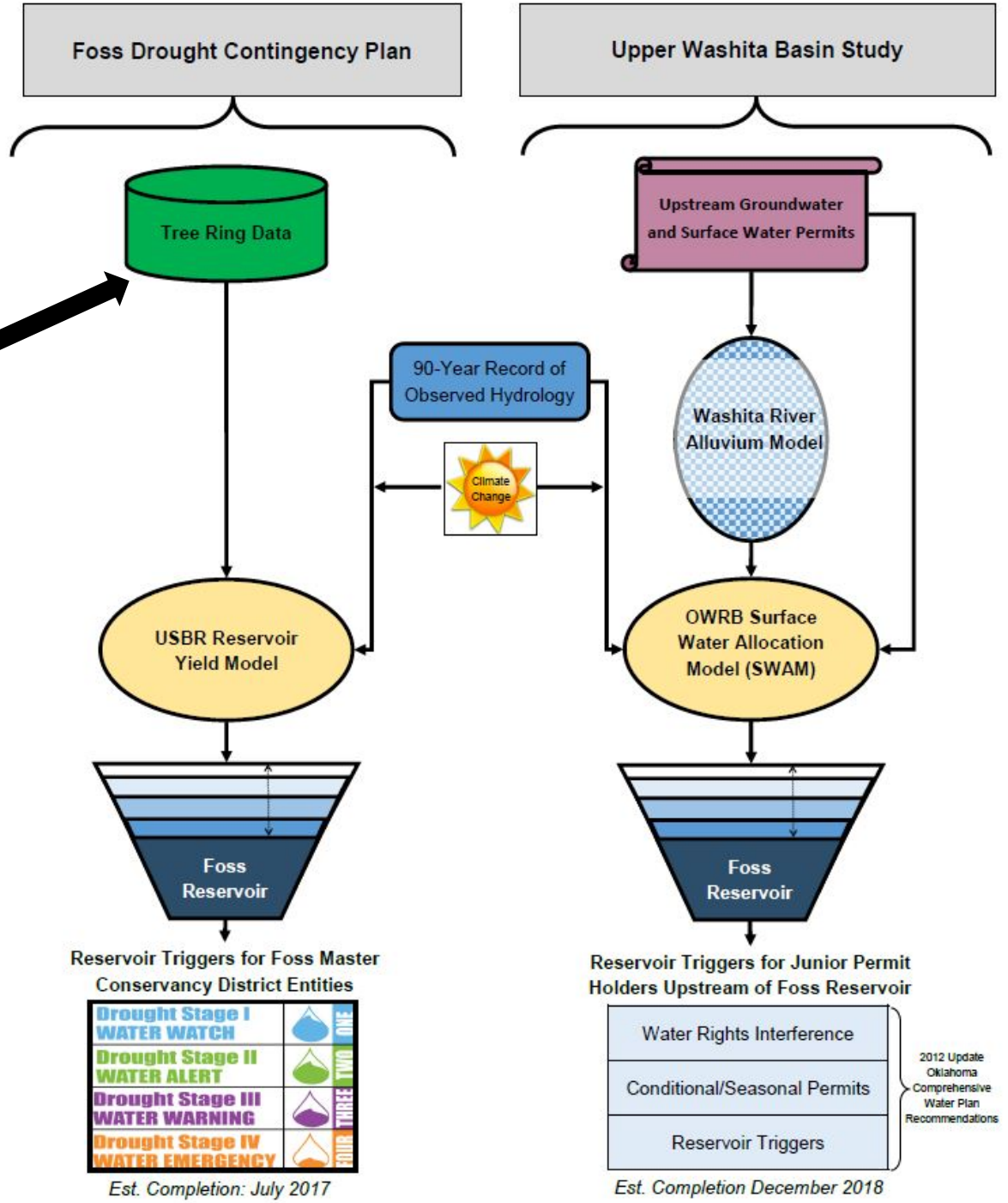
2012	2014	2015	2015	2016	2017	2019	2020?
Upper Red Basin Study	Upper Washita Basin Study	Foss Drought Contingency Plan	Washita Reservoir Operations Pilot	City Altus Drought Resiliency Grant	Mountain Park Drought Resiliency Grant	Foss Drought Resiliency Application	Mountain Park Water Marketing Grant?

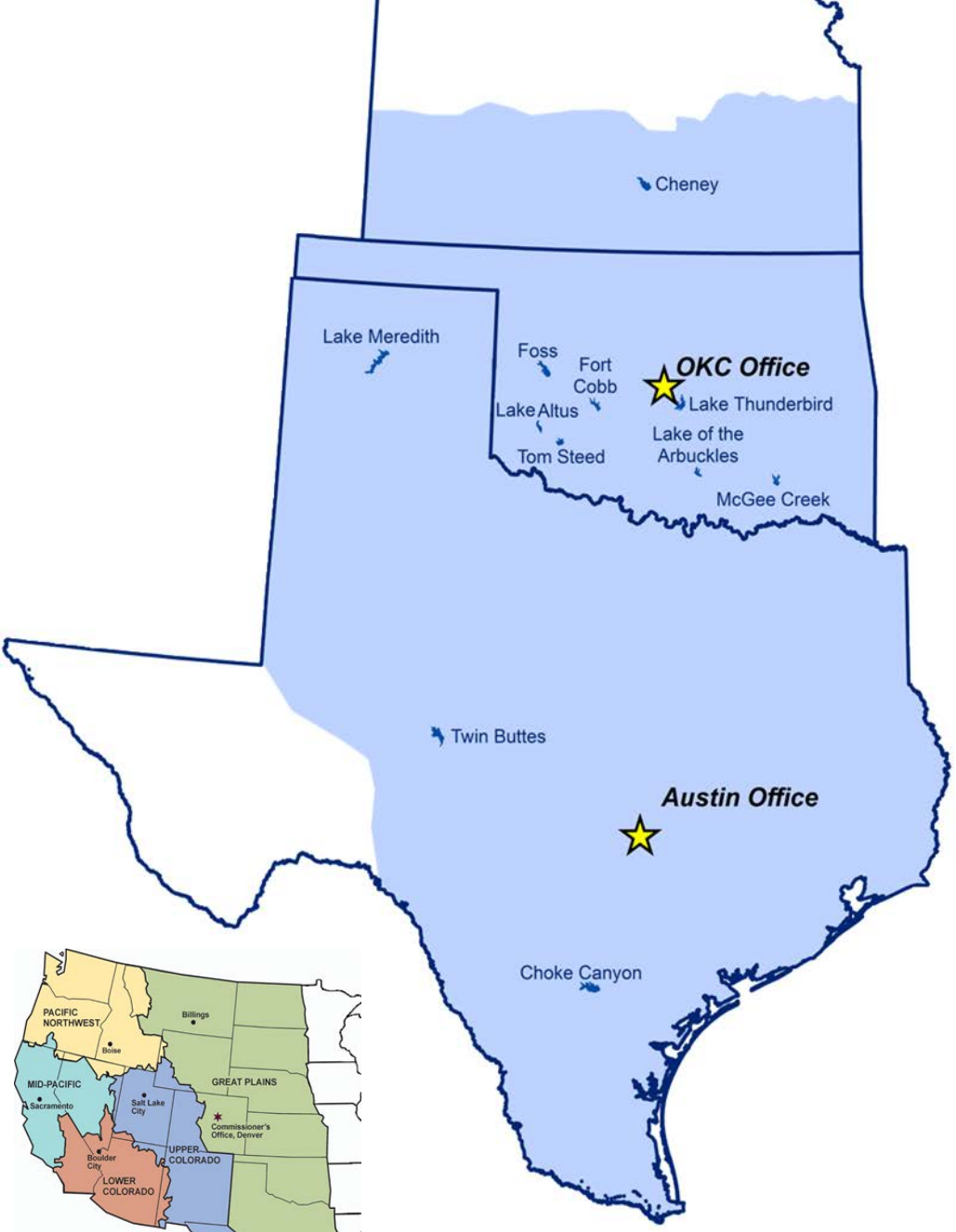
Leveraging WaterSMART programs to meet local needs

Case Study – Southwest Oklahoma

Washita Reservoir Operations Pilot



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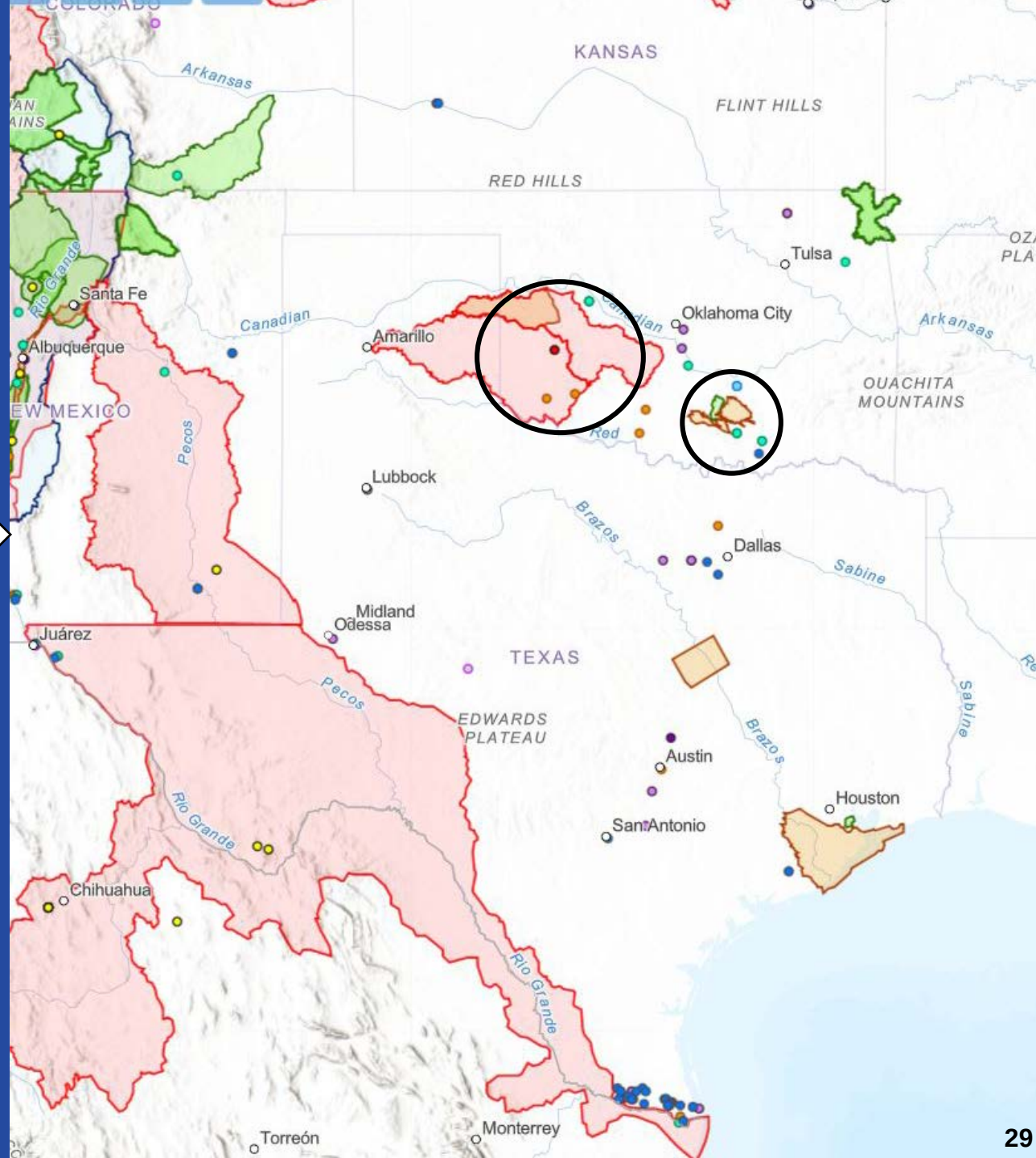
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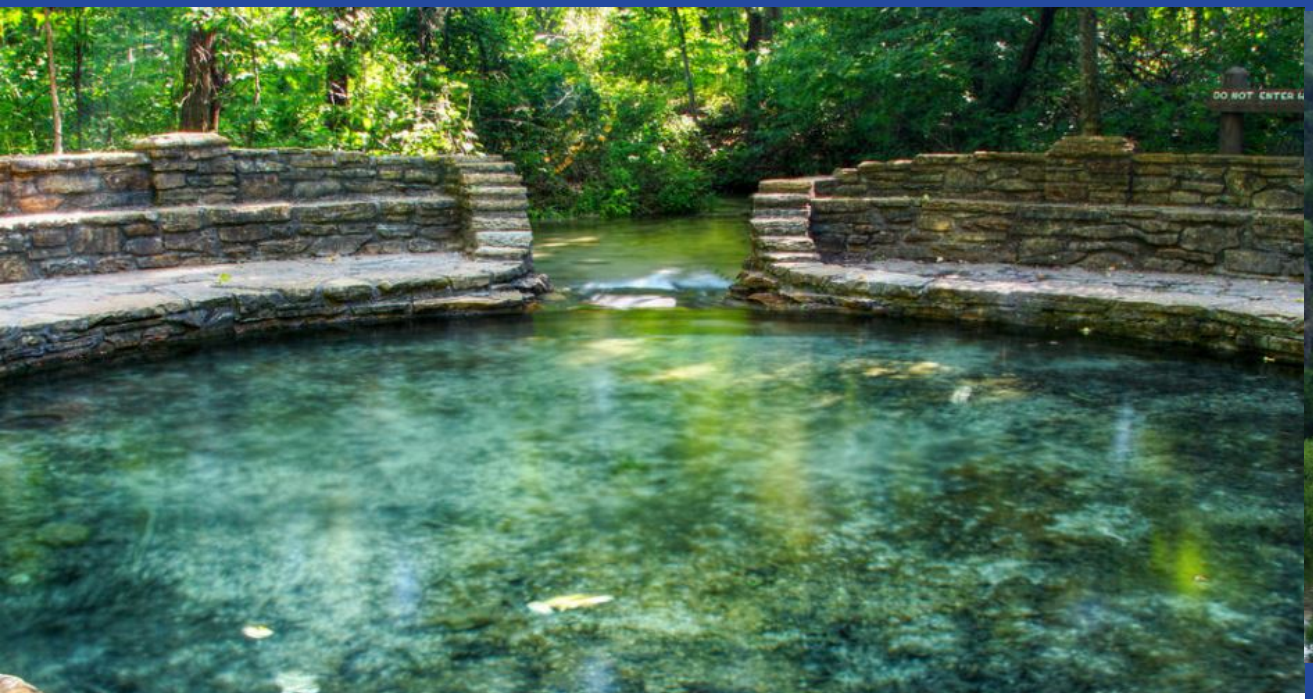
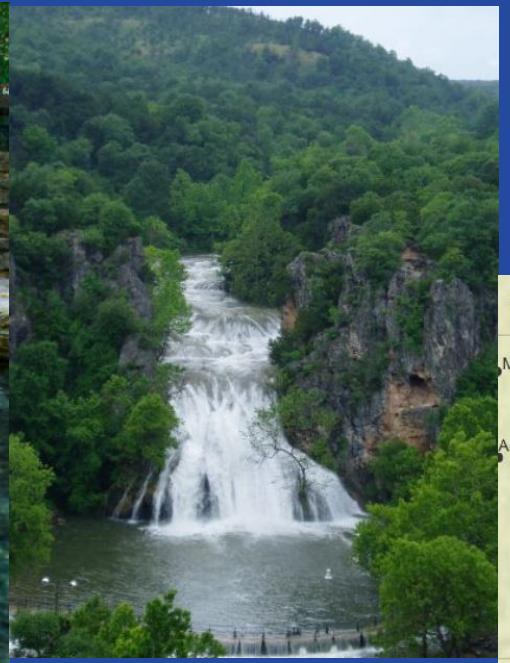
Amarillo
Arkansas
OUACHITA MOUNTAINS
NEW MEXICO
Pecos
Red
Lubbock
Brazos
Dallas
Sabine
Midland
Odessa
Juárez
TEXAS
Pecos
EDWARDS PLATEAU
Austin
Brazos
Sabine
Houston
San Antonio
Rio Grande
Chihuahua
Rio Grande
Torreón
Monterrey

Issue: Sole-source Aquifer in decline from pumping, drought, water quality issues, etc.





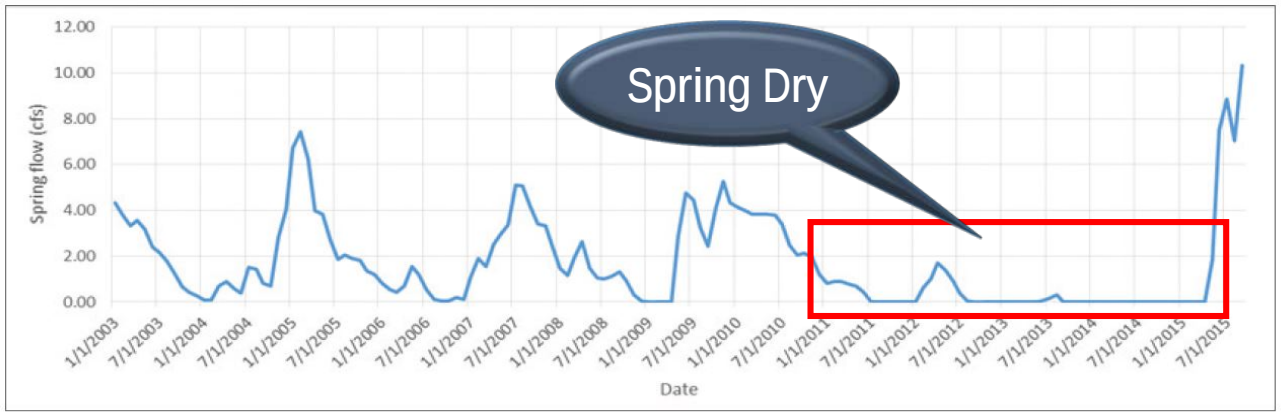
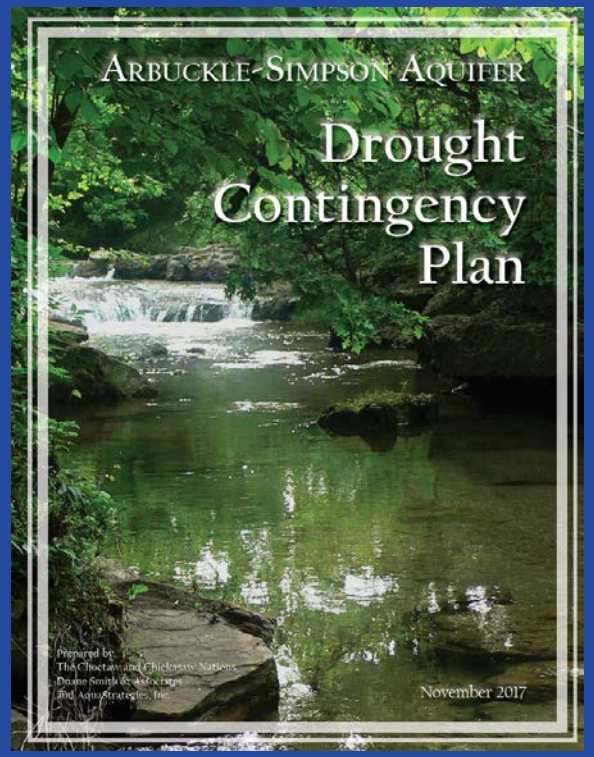


Figure 3: Flow from Antelope Springs for period of record.

USBR's Lake of the Arbuckles

Leveraging WaterSMART programs to meet local needs

Case Study – Southeast Oklahoma



2015	2016	2017	2018	2018	2020?
Arbuckle-Simpson Aquifer Regional Drought Contingency Plan	Lake of the Arbuckles Cooperative Watershed Management Phase I Grant	City of Ada Title XVI Feasibility Study	Tishomingo and Durant Small-Scale Water Efficiency Grants	Arbuckle-Simpson Aquifer Water Marketing Grant	Cooperative Watershed Management Phase II?

The Application Process and Awards

RECLAMATION
Managing Water in the West

Funding Opportunity Announcement No. BOR-DO-19-F004

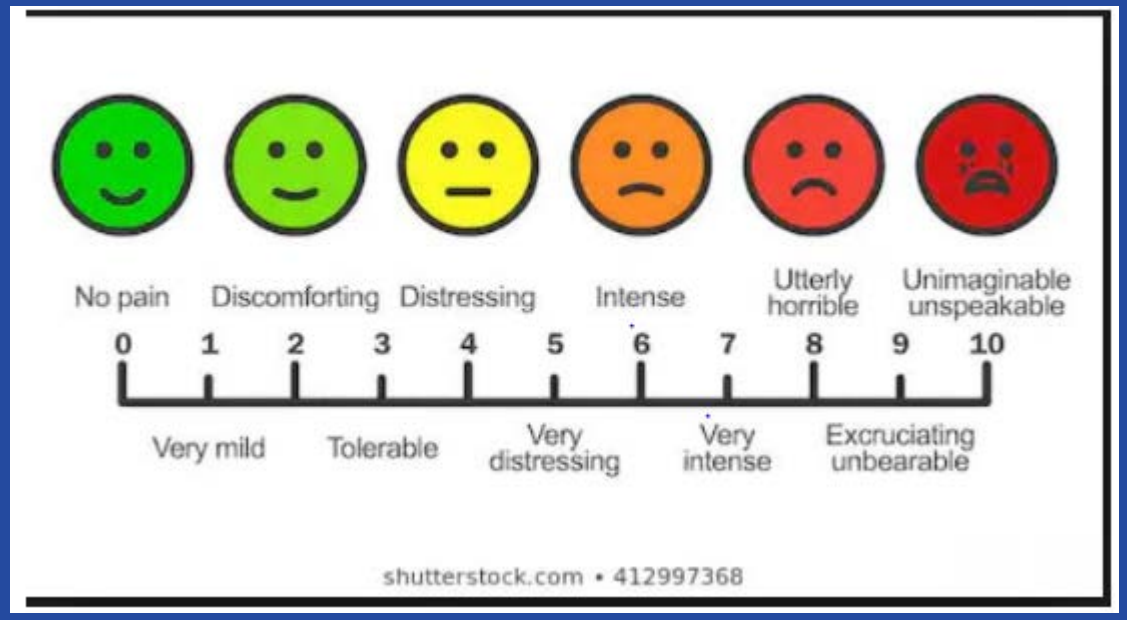
WaterSMART Grants:
Water and Energy Efficiency Grants for Fiscal Year 2019

U.S. Department of the Interior
Bureau of Reclamation
Policy and Administration
Denver, Colorado

January 2019

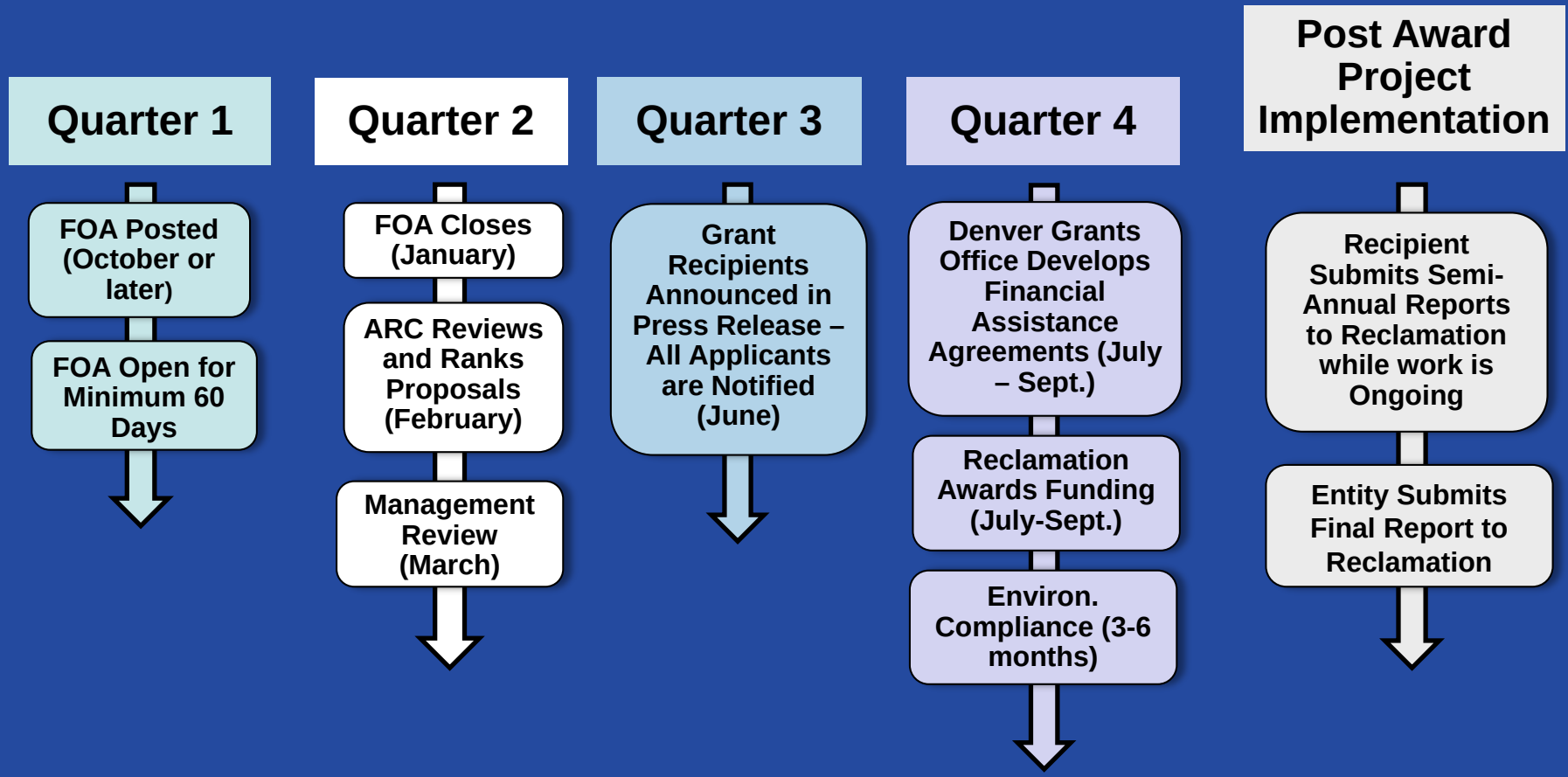
Application Process and Awards

- Questions for participants:
- How many of you have applied previously for WaterSMART funding?
- How did you feel about the application process?



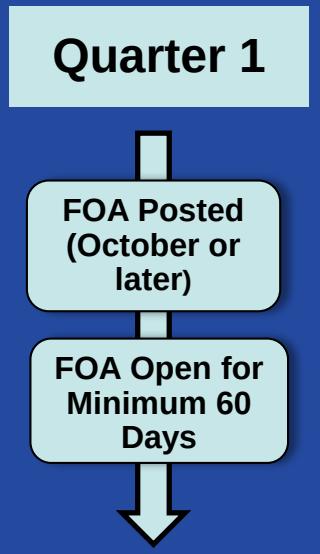
WaterSMART Selection Process

Schedule



WaterSMART Selection Process

Evaluation Criteria



The Funding Opportunity Announcement (FOA) describes the evaluation criteria

All proposals are evaluated using established criteria

Addressing each criterion in detail and providing support for your responses is the most important part of writing a strong proposal

Application Tips

Evaluation Criteria

- **Copy and paste the evaluation criterion from the FOA verbatim above your response to that criterion. For Example:**

F. Criterion F: Implementation and Results

Subcriterion No. F.1: Project Planning

Does the project have a Water Conservation Plan and/or System Optimization Review (SOR) in place. Please self-certify, or provide copies of these plans where appropriate to verify that such a plan is in place.

Provide the following information regarding project planning:

(1) Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, or other planning efforts done to determine the priority of this project in relation to other potential projects.
The District has a Water Conservation Plan, but a specific plan for this project has not been prepared. A Feasibility Study for the Phase 1 and Phase 2 project was completed in 2013 and adopted by the Board.

Application Tips

Evaluation Criteria

- **Address all parts of multi-part questions - each aspect counts**

Evaluation Criterion H: Connection to Reclamation Project Activities

1. How is the proposed project connected to Reclamation project activities?

BRCC receives water through Cutler Reservoir. Cutler Reservoir belongs to PacifiCorp Which has senior rights to the flows that are stored in Hyrum Reservoir which are a Reclamation Project. Hyrum Reservoir provides water to run PacifiCorp hydroelectric facility on the Bear River. PacifiCorp has an obligation to deliver all of BRCC's water through Cutler Reservoir.

2. Does the applicant receive Reclamation project water?

No. BRCC receive out water through the Bear River.

3. Is the project on Reclamation project lands or involving Reclamation facilities?

No.

4. Is the project in the same basin as a Reclamation project or activity?

Yes, the project is located in the Bear River Basin where a number of Reclamation projects are located.

5. Will the proposed work contribute water to a basin where a Reclamation project is located?

Yes, as the project conserves water and reduces losses and will help contribute to the storage and potential flows in the Bear River and eventually to the Great Salt Lake. The Bear River is a main tributary to the Bear River Migratory Bird Refuge and the Great Salt Lake by conserving water and allowing it to move through the river to enhance habitats and recreational opportunities.

6. Will the project help Reclamation meet trust responsibilities to Tribes?

No.

Application Tips

Evaluation Criteria

- **Be sure to provide as much support as possible for statements included in the proposal. For example:**

Canal Lining/Piping: Canal lining/piping projects can provide water savings when irrigation delivery systems experience significant losses due to canal seepage. Applicants proposing lining/piping projects should address the following:

a) How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.

Two inflow/outflow tests were done in August 2016. The first tests were done at intervals of approximately one mile along the entire length and a more detailed follow up study was done in the high flow loss areas. The canal diversion gates were closed during the tests. More details about the tests are given in the following section.

The water savings were determined for each of the canal segments by finding the difference in flow through a segment of canal, measured in cubic feet per second. These flows were then converted to an acre feet per year volume assuming a six-month irrigation season. The following equation shows how the total savings for the Project were calculated.

Overall project annual acre-feet savings per mile equation:

$$\left[\left(\frac{(35cfs-27cfs)+(14cfs-11cfs)}{(41450ft-39020ft)+(52600ft-50630ft)}\right)*\frac{60sec}{min}*\frac{60min}{hr}*\frac{24hr}{day}*\frac{30day}{mo}*\frac{6mo}{yr}*\frac{1ac}{43560ft^2}*\frac{5280ft}{1mile}\right]$$

Application Tips

Evaluation Criteria

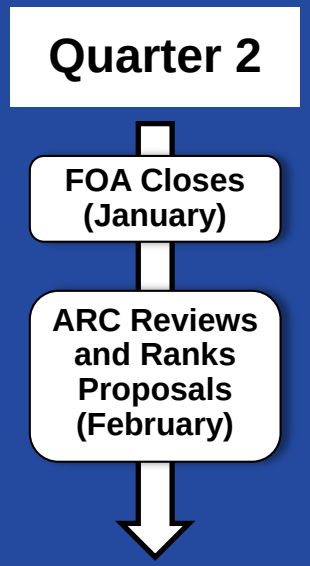
- **Unsupported claims do not receive a high scores from the ARC:**

During the summer of 2016, staff estimated flows at all Main Canal lining drain exits. This was done by visual inspection and estimation of the amount of water flowing by an experienced Watermaster and engineering staff.

Over the years, staff has gained considerable experience in estimating flows by sight when comparing visual estimates to measured flow at lining drain exits where weir blades could be installed relatively easily. Staff also gained considerable confidence estimating these flows during the 2015 drought when looking for the best sites to install diesel powered pumps to pump the exiting water back to the Main Canal.

WaterSMART Grant Selection Process

Application Review Committee



Applications are reviewed and ranked by an Application Review Committee (ARC)

ARC is made up of experts in the subject-matter area from across Reclamation

Reviewers must stick to 4 corners of the document and may not evaluate based on any information outside of the application. The ARC can request clarifications from the Applicant but only if enough information is provided to inform the question (so be sure to spell everything out)

The ARC's ranking is based on the merits of the proposal, evaluated against the criteria

The ARC's ranking rules the selection of projects

Application Tips

Preparing your Budget

Budget:

Do not provide lump sums. Instead you should provide a detailed breakdown of costs.

Be sure to include all projects costs, not just the Federal funding. (See example)

Do not need to identify activities that will be funded via Federal/Non-Federal funds. Complete the budget for all project costs.

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/Unit	Quantity		
Salaries and Wages				
General Manager	$55.69	120	Hours	$6,683
Field Staff Supervisor	$27.90	300	Hours	$8,370
Crew #1	$34.33	640	Hours	$21,971
Fringe Benefits				
All Employees	14.5%	$37,024		$5,368
Equipment				
D6 Dozer	$46.89	300	Hours	$14,067
Excavator (JD290)	$84.91	640	Hours	$54,342
Supplies and Materials				
36" A-2000 Pipe	$52.00	6800	LF	$353,600
36"x15" Tee	$1,200.00	4	EA	$4,800
36" Elbows	$1,350.00	4	EA	$5,400
Concrete	$105.00	8	CY	$840
Contractual/Construction				
Engineering Services	$69,735.00	1	LS	$69,735
Other				
Reclamation environmental and cultural compliance costs	$2,000.00	1	LS	$2,000
Environmental Compliance	$5,215.00	1	LS	$5,215
TOTAL DIRECT COSTS				**$605,106.20**
Indirect Costs				
Di Minimis	10%	$145,231.20	MTDC	**$14,523.12**
TOTAL ESTIMATED PROJECT COSTS				**$619,629.32**

Application Tips

Preparing your Budget

Project Costs

- **Project Costs must be "allowable, allocable and reasonable"**
- ***Allowable* costs could include:**
  - **Labor**
  - **Equipment**
  - **Materials**
  - **All costs must be *directly related* to the project**
- **Costs that are *not* allowable could include:**
  - **Pre-award design work**
  - **General marketing or advertisements not required for the project**

Application Tips

Preparing your Budget

FAQs on Project Costs:

- Indirect costs: Can indirect costs be included? If so, how do you determine the amount?
- Parallel projects: Can costs from ongoing work that is complementary to the project be counted towards the non-Federal cost share contribution?
- Donated Services: If a person or entity contributes donated time to the project, how should it be valued?
- Outreach: Can outreach, educational activities or advertising be included as project costs?

Application Tips

Preparing to Submit your Proposal – Get Registered

- **Start necessary registrations <u>early</u> – processes take time**
  - **DUNS (Data Universal Number System) Number – used to establish a business credit file and *required to register in SAM.gov***
  - **SAM.gov (System for Award Management) – required to receive a Federal grant or cooperative agreement. Register in SAM early! It can take up to 6 weeks to get registered and you need to be registered in SAM before registering in grants.gov**
  - **ASAP.gov (Automated Standard Application for Payments) – required to access awarded Federal funds**

Application Tips

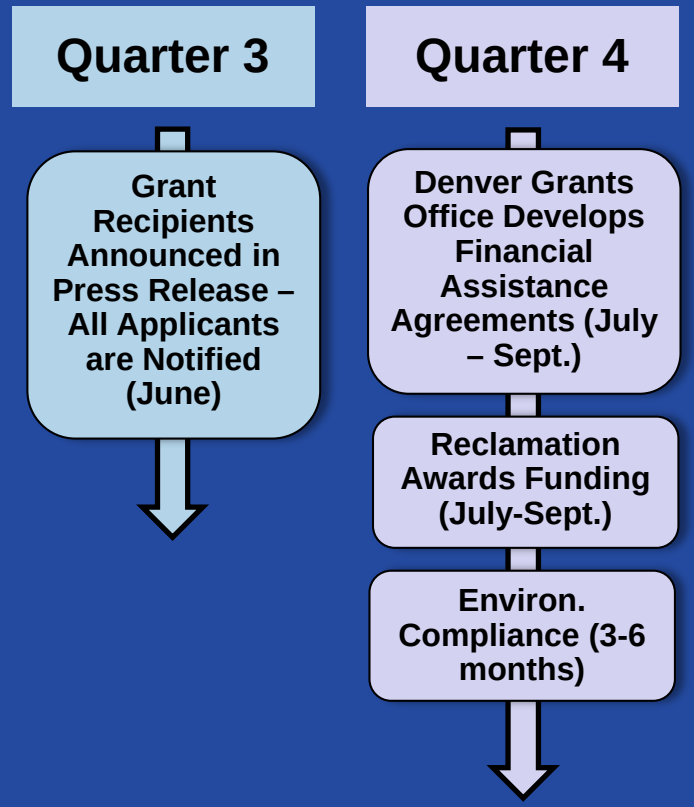
Preparing to Submit your Proposal

- **Do Not Wait Until the Last Minute to Submit your Proposal**
  - **Check page number requirements and the submission deadline**
  - **Register in https://www.grants.gov/ well before the application deadline. DO NOT wait to the last minute to submit the application. Processing issues have occurred that render applications submitted at the last moment ineligible.**
  - **If you are within weeks of the application deadline and you have not registered in grants.gov, plan to submit a hard copy of your application**
  - **If you are registered in grants.gov, you can submit a version of your proposal in advance of the deadline to make sure you understand the process. Then you can submit your final version when you are ready. Give us a call and let us know to use your latest submission.**

Pre-award Determinations

Preparing to Submit your Proposal

- Your project was selected for funding! Now what?
  - Determination of allowability of costs and existence of appropriate business practices
  - Financial assistance agreement developed and finalized
  - Environmental compliance completed
  - Recipients notified when work can begin



Pre-Award Determinations

Once your project is selected for funding, expect a call from Reclamation to discuss the following:

- **Project Costs**
  - **Independent determination that the budget estimate is “allowable, allocable and reasonable”**

- **Business Evaluation**
  - **Determination that the Applicant’s financial management and business processes are sufficient to ensure that the project can be completed in accordance with the requirements of 2 CFR 200, Department policy and Bureau policy**

What to provide

- **Project Cost Support**
  - Documentation that supports the unit price for each budgeted item

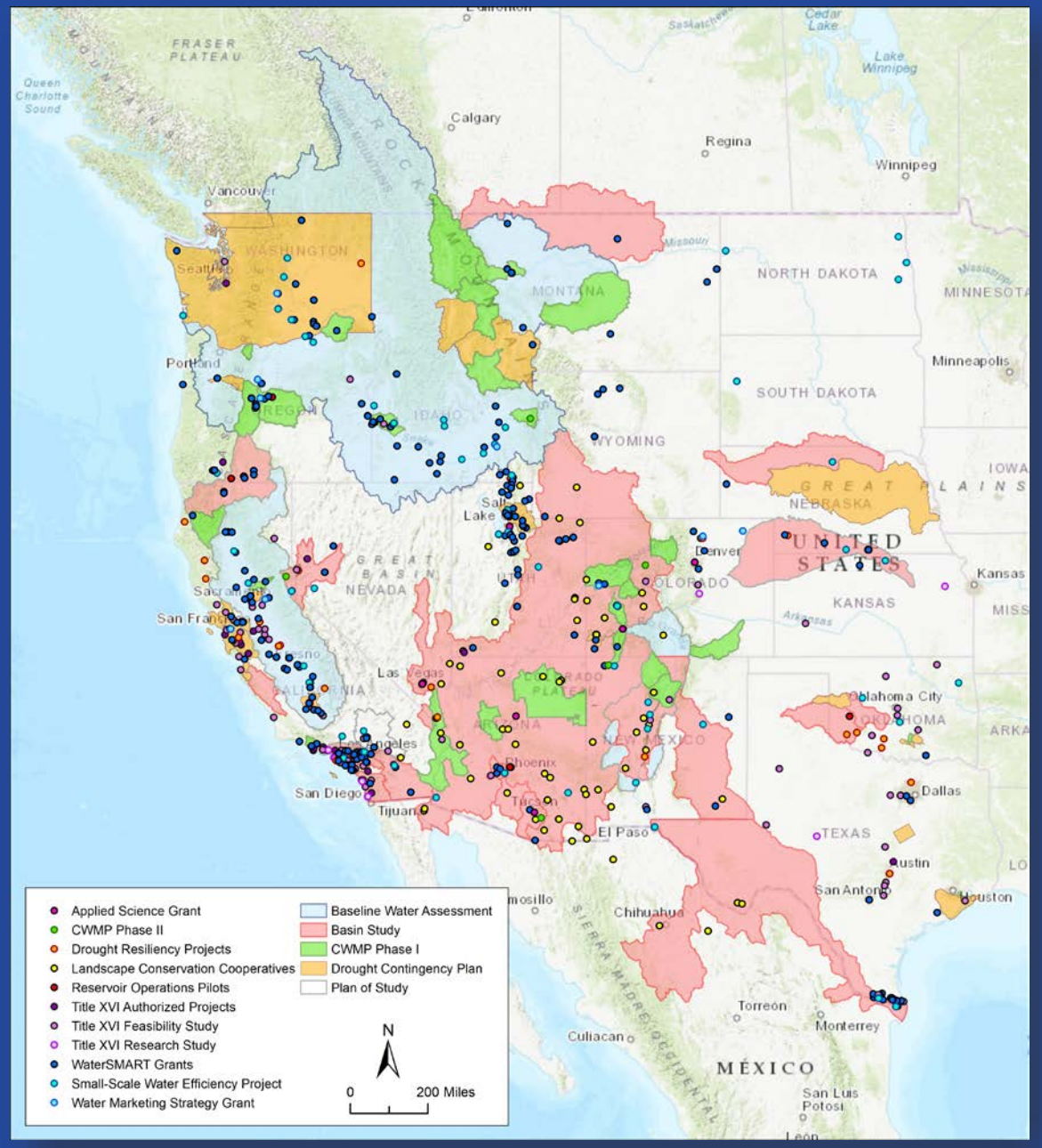
- **Financial Management and Business Processes**
  - Financial Management
  - Procurement
  - Timekeeping
  - Equipment Use
  - Contract Management
  - Property Management

- **Audit**
  - Single Audit
  - Independent Financial Statement Audit or
  - Pre-award Systems Survey

WaterSMART Visualization Tool

- Provides users with interactive maps of each WaterSMART Program and project
- Includes Featured Project tours
- Shows program growth since 2010
- Recently updated with new application features

WaterSMART Data Visualization Tool



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